

Mission Statement:

The UTC protects consumers by ensuring that utility and transportation services are fairly priced, available, reliable, and safe.



Washington Utilities and Transportation Commission

Incorporation of External Goals

Prepared for the Kyrgyz Republic SEA

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Goals of External Influences

1. Encourage efficient use of resources
2. Encourage environmentally beneficial decisions
3. Social welfare (low income)
4. Economic development

Sources of External Influences

- Federal policies and laws
- State policies and laws
- Local policies and laws
- Advocacy Groups
 - Environmental
 - Customer groups (low income, industrial)

Targets for External Influences

- Influences target all areas of energy system:
 - Generation (resource type, emissions, siting)
 - Transmission (siting, pricing)
 - Distribution (facilities, safety, reliability, aesthetics)
 - Consumption (fuel choices, patterns of use, end-use options)

External Influences

- WUTC can incorporate external influences through:
 - **Cost inclusion (or exclusion)**
 - **Allocation choices**
 - **Rate structures**
 - **Service options**
- Balance cost vs. value of policy option
 - **Utilize cost-benefit analysis**
 - **Recognize qualitative benefits not able to quantify**

Encouraging More Efficient Use of Resources



- Public Utilities Regulatory Policies Act of 1978
 - Set out federal ratemaking standards for states to implement, if appropriate
- Policies adopted by State
 - A. Conservation programs
 - B. Time of Use
 - C. Interruptible Rates
 - D. Other Demand Response programs

A. Conservation

- Conservation is often the least-cost resource, however conflicts with profit-maximizing nature of investor-owned utilities.
- Remove disincentives for utility
 - Decouple profits from sales (revenue per customer)
 - Lost revenue adjustments
- Create incentives for utility
 - Performance-based rewards or bonuses
- Now, costs recovered through separate surcharge, trued-up annually, for immediate cost recovery
- Previously, conservation costs capitalized

B. Time-of-Use Rates

- Price signals for customers to shift usage from more expensive to less expensive periods.
- New usage pattern intended to reduce the average cost of energy (create higher load factors).
- Can be designed as seasonal, critical peak, daily or hourly.
- Puget Sound Energy experience – 3 daily periods
 - Small inter-period price differences in a system with sufficient capacity (hydro) did not support the costs of the daily program.

C. Interruptible Rates

- Interruptible service requires all or some portion of a customer's load to be shut off at the discretion of the utility.
- May be utilized for economic reasons or reliability.
- Tariffs may have constraints on when and how much load can be interrupted.
- Rate designed by removing capacity costs to serve customer.
- Infrequently called upon by most companies.

D. Other Demand Response

- Incentives to reduce (or shift) consumption
- Customer Buyback Programs
 - Bill discounts for reducing use x% over a prior period.
- Industrial Curtailment Programs
 - Companies post hourly prices (approx. ½ of market price) for customers willing to curtail load.
- Irrigation Buyback Programs
 - Longer-term buyback. Companies pay irrigators to disconnect pumps for the season.

Encouraging Good Environmental Choices



A. Renewable Portfolio Standards

- Require utilities to meet load by certain date (e.g. 2010) with x% of renewable generation (e.g. 10%)
- Have been proposed at both Federal and State levels
- Adopted by many states that have restructured industry

B. Green tariffs

- State law passed in 2001 requiring electric utilities to provide voluntary option for customers to purchase energy from renewable resources
- Customer purchases block of energy (e.g. 100 kWh) at a premium price (e.g. \$2)
- 17,800 customers in state have purchased 39,390 MWh

Encouraging Good Environmental Choices



- C. Inclusion in rates of environmental clean-up costs
- D. Extra return on investment (2%) on renewable resources placed in rate base
- E. Adder of 10% allowed on conservation costs for cost-benefit calculations, in recognition of environmental attributes
 - Originally identified in NW Power Planning and Conservation Act (Federal law)

Social Welfare Goals: Low Income



- A. Winter moratorium in state law
 - Can't disconnect low-income customer (with electric space heat) between November and March if customer meets certain conditions.
- B. In 1999 state legislature authorized utilities to offer low income rates; costs recovered through charges to other customers.

Economic Development

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- Conceptual basis: if excess capacity exists, it may be beneficial to ratepayers to attract new loads (or retain load) through rates lower than fully embedded cost.
 - WUTC has no explicit authority from the legislature to approve economic development rates.
 - Offering different rates to similarly situated customers, based solely on when they became customers may be unreasonably preferential, prejudicial and discriminatory.

Economic Development

- At the Federal level, certain industries (e.g., aluminum manufacturers) were given direct access to low-cost Federal power in the Northwest.
 - Originally intended to help utilize and pay for the federally-marketed power from hydroelectric generation
 - Contracts were renewed in early '80s in order to keep the industries in the region--although at a higher rate but with assurance of long-term power supply

Economic Development

- **However, rates or incentives are offered in other states to attract new or expanded loads**
 - Example: New York utilities offer:
 - Credit based on the number of new jobs created
 - Rate discount to occupy vacant office building
 - Credit/rebate for energy audit and efficiency improvements
 - Example: Vermont utility offers rate and efficiency discounts up to 40%
 - Example: Bangor Hydro Electric added conditions to economic development rates in order to hold harmless existing rate payers:
 - Any new load added to the economic development tariff requires Commission approval before being included in utility's load and cost calculations
 - Additional costs will be borne by shareholders if company's cost projections prove inaccurate

Economic Development

- Example: Massachusetts ruled the economic development rates must exceed long-run marginal cost rates, to address claims that such rates impose future costs on ratepayers. Additionally, developed factors to reduce “free-ridership”:
 - Rate must be a critical factor in customer’s decision to relocate
 - Electricity must be a significant portion of customer’s operating expense
 - Customer has viable economic alternatives to services offered by utility
 - Customer can relocate easily
- Example: Arizona Commission approved rate discount for existing manufacturer with the requirement that the company add at least 200 new jobs each year to qualify for annual billing credits.